Leak Detector

In the photo, a technician is demonstrating use of a portable device capable of detecting radioactive leakage. If there were a leak, the radioactivity would illuminate the unit's viewing screen and identify the source of the leak; in the absence of radioactivity, the screen shows nothing. Built by Ni-Tec., Inc., Niles, Illinois, the device is in use as a radiation detector at Argonne National Laboratories, the government nuclear research facility in Argonne, Illinois.

The Ni-Tec unit is a modified version of the LIXIscope, a small, battery-powered, portable x-ray instrument developed by Goddard Space Flight Center. Adapted from a technique for studying x-ray sources in space, the LIXIscope employs a small amount of radioactive material to produce the x-ray image; the radioactive source is not needed in the Ni-Tec radiation detector. Ni-Tec is one of several companies licensed by NASA to market the LIXIscope, which has high potential for use in medicine, dentistry and industrial operations. Broad application of the system hinges on government approval for general use of an instrument containing radioactive material.